I. FROM	CEMVD-P	D-N SUBJECT	MMARY SHEE Review Plants for Greater inity Pre-Kat	n for Imp	eans Ar	ation rea West Bank cal Mitigation
II. TO:	CEMVD-DE			DATE:	7 Feb	2012

III. Summary of Action Requiring Coordination:

1. ISSUE: Engineering Circular 1165-2-209 establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R). It provides the procedures for ensuring the quality and credibility of U.S. Army Corps of Engineers (USACE) decision, implementation, and operations and maintenance documents and work products. The EC is applicable to all HQUSACE elements, major subordinate commands (MSC), districts, laboratories, and field operating activities having civil works planning, engineering, design, construction; and operations & maintenance (O&M) responsibilities.

2. DISCUSSION: The Review Plan (RP) for the subject mitigation implementation effort was reviewed by MVD (MVD-RB-T) which is the Review Management Organization (RMO) for other work products including implementation documents. The RMO concurs with the Review Plan that no independent external peer review of this project is required since this is an implementation effort and the mitigation effort does not pose potential hazards or significant threat to human life. The RP is in compliance with the current peer review policy requirements contained in EC 1165-2-209, entitled "Civil Works Review Policy". The MSC Commander's approval of the RP is required to assure that the plan is in compliance with the principles of EC 1165-2-209.

3. RESOURCE IMPACT: NA.

4. RECOMMENDATION: Sign letter approving Review Plan.

IV. Action Officer: Stephen M. Stuart Telephone Number: 601-634-5829 Directorate: PD Chief: Eddie Belk							Eddie Belk
	. Coordi			VI.	Comma	and Section	Staffing
Office	Concur	Non-Concur*	Date	Office		Approval	Disapproval
Wilbanks PD-N	R		2/7/12	EX		138	
Smith PD-N	SKSI		2/7/12	DD		151/	
Belk	Folk	•	B	MG Peaboo DE	dy (A12/13	
Lee RB-T	ABI		2/9/12	Cor	mmala	Section Re	emarks
OC-MVD BIR Soc.	200		2/13/12	VII.	dt.	2	
*Non-concurrences require comment CEMVD Form 914 NOV 02							



DEPARTMENT OF THE ARMY

MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS P.O. BOX 80 VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO ATTENTION OF:

CEMVD-PD-N

13 Feb 2012

MEMORANDUM FOR Commander, New Orleans District

SUBJECT: Review Plan for Implementation Documents for Greater New Orleans Area West Bank and Vicinity Pre-Katrina Environmental Mitigation

1. References:

a. Email, CEMVN-PM-OW, 29 November 2011, subject: Pre-Katrina Review Plan with RMO concurrence (encl 1).

b. Memorandum, CEMVD-RB-T, 29 November 2011, subject: Pre-Katrina Mitigation Review Plan (encl 2).

c. EC 1165-2-209, Civil Works Review Policy, 31 Jan 2013.

2. I approve subject Review Plan (RP) as enclosed and concur with CEMVD-RB-T that an independent external peer review of this project is not required since this is an implementation effort and the mitigation effort does not pose potential hazards or significant threat to human life. The RP is in accordance with EC 1165-2-209 and complies with all requirements for the implementation phase of the project. Non-substantive changes to this RP do not require further approval.

3. The District should post the RP to its website and provide a link to the RMC for their use.

4. The MVD points of contact are Mr. Robert Fitzgerald, CEMVD-RB-T, at (601) 634-5922 for technical review plan details, and Mr. Stephen Stuart, CEMVD-PD-N, at (601) 634-5829 for all other matters.

JOHN W. PEABODY

2 Encls

Major General, Commanding

CF: CEMVN-PM-OW (Templeton)

Stuart, Stephen M MVD

From: Sent: To: Cc: Subject: Attachments: Chewning, Brian MVD Tuesday, November 29, 2011 1:18 PM Stuart, Stephen M MVD Ruff, Greg MVD FW: Pre-Katrina Review Plan with RMO concurrence Final Draft Pre-K Mitigation Review Plan (11-23-11).docx; Pre-Katrina Mitigation concur memo29 Nov 11.pdf

----Original Message-----From: Templeton, John A MVN Sent: Tuesday, November 29, 2011 1:15 PM To: Chewning, Brian MVD Cc: Holley, Soheila N MVN; Salaam, Tutashinda MVN; Minton, Angela E MVN-Contractor; Declet-Martinez, Gienell MVN Subject: Pre-Katrina Review Plan with RMO concurrence

Good afternoon Mr. Chewning,

Attached is the Review Plan for the Pre-Katrina Mitigation and the concurrence memo from Mr. Fitzgerald. Please let me know if anything else is needed to move this plan towards final approval.

1

Thanks,

John Templeton PRO 504-862-1021 bb: 504-940-4057



DEPARTMENT OF THE ARMY MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS P.O. BOX 80 VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO ATTENTION OF:

CEMVD-RB-T

29 Nov 2011

MEMORANDUM FOR Commander, New Orleans District, ATTN: CEMVN-PM-OW SUBJECT: Pre-Katrina Mitigation Review Plan

1. Reference email, John Templeton, CEMVN-PM-OW, 22 Nov 2011, subject as above

2. This office concurs with subject Review Plan.

P.E ROBERT H. Chief, Business Technical Division



US Army Corp of Engineers New Orleans District

Review Plan For Implementation Documents for

Greater New Orleans Area West Bank and Vicinity Pre-Katrina Environmental Mitigation

Mississippi Valley Division New Orleans District

1 Sept 2011

Review Plan

Implementation Documents Greater New Orleans Area West Bank and Vicinity Pre-Katrina Environmental Mitigation

Mississippi Valley Division New Orleans District 1 Sept 2011

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Appendices

Appendix A: List of Project Delivery Team Members

Appendix B: Sample Statement for Technical Review of Decision Documents

Review Plan

Implementation Documents Greater New Orleans Area West Bank and Vicinity Pre-Katrina Environmental Mitigation

Mississippi Valley Division New Orleans District 1 Sept 2011

1 INTRODUCTION

1.1 Purpose

This Review Plan defines the scope and level of quality management activities for the Greater New Orleans Area West Bank and Vicinity (WBV) Pre-Katrina Environmental Mitigation Projects. This Review Plan is a component of the Environmental Mitigation Project Management Plan (see Section 1.2 References) in accordance with EC 1165-2-209.

1.2 References

1.4	References					
а.	ER 1110-2-1150	Engineering and Design for Civil Works, 31 August 1999				
b.	ER 1110-1-12Engineering and Design - Quality Management, 21 July 2006, incorporating Change 1, 30 September 2006					
C.	EC 1165-2-209	Civil Works Review Policy 31 January 2010, with Errata Sheet 1 dtd 15 July 2010				
d.	EC 1105-2-412	Planning Assuring Quality of Planning Models, 30 December 2009				
e.		, New Orleans, Louisiana Hurricane Protection Project, Mitigation ementation Report - 2005				
f.	Abbreviated Project Information Report. Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico and Pandemic Influenza Act, 2006 (Public Law 109-148), For Accelerated Completion of Construction of that Portion of West Bank and Vicinity, New Orleans, Louisiana, Hurricane Protection Project Situated in Jefferson, Orleans and Plaquemines Parishes, Louisiana. – June 2006					
g.	Greater New Orleans Area Hurricane and Storm Damage Risk Reduction System. Environmental Mitigation Program Management Plan. South Louisiana Area. 2010					
h.	Environmental Mitigation Project Management Plan of Lake Pontchartrain and Vicinity, Hurricane and Storm Damage Risk Reduction System Louisiana, Project and West Bank and Vicinity, New Orleans, Louisiana Pre-Katrina and Hurricane and Storm Damage Risk Reduction System Louisiana, Project June 2010					
i.	Peer Review Plan, Implementation of Section 2035 of WRDA 2007 for the Greater New Orleans (GNO) Hurricane and Storm Damage Risk Reduction System (HSDRRS). 22 Oct 08 – Revised HQ Approval Date. Latest revision going through approval process.					
j.	Greater New Orleans Area Hurricane and Storm Damage Risk Reduction System Environmental Mitigation Program Management Plan. South Louisiana Area. June 2010					
k.	Hurricane and Storm Da October 2009	amage Risk Reduction System (HSDRRS) Quality Management Plan 30				

- Memorandum for Commander, South Atlantic Division, Commander, Mississippi Valley Division.
 Subject: Post Hurricanes Katrina, Wilma, and Ophelia Expenditure of Flood Control and Coastal Emergency (FCCE) Funds for Restoration and Rehabilitation, and for Accelerated Work to Complete Authorized Projects, in accordance with the Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico and Pandemic Influenza Act, 2006 (Public Law 109-148). From Don T. Riley, Major General, USA, Director of Civil Works. 14 February 2006.
- Memorandum for Commander, Mississippi Valley Division. Subject: Request for Waivers to Specific Corps Policies Affecting Prompt Completion of the Hurricane Protection System for 3rd Supplemental Work. Steven L. Stockton, P.E., SES Deputy Director of Civil Works. 21 August 2006.

Memorandum for Commander, Mississippi Valley Division. Subject: Request for Concurrence on Crediting Recommendation on 3rd and 4th Supplemental Work. Steven L. Stockton, P.E., SES Deputy Director of Civil Works. 28 September 2006.

- n. Army Regulation 15–1, *Committee Management*, 27 November 1992 (Federal Advisory Committee Act Requirements)
- o. National Academy of Sciences, *Background Information and Confidential Conflict Of Interest Disclosure, BI/COI FORM 3*, May 2003

1.3 Review Requirements

This Quality Control (QC) Review Plan (RP) was developed in accordance with EC 1165-2–209, which establishes the procedures for ensuring the quality and credibility of US Army Corps of Engineers (USACE) decision and implementation documents through independent review. This RP describes the scope of review for the current phase of work. All appropriate levels of review (DQC, ATR, IEPR and Policy and Legal Review) will be included in this RP and any levels not included will require documentation in the RP of the risk-informed decision not to undertake that level of review. The RP identifies the most important skill sets needed in the reviews and the objective of the review and the specific advice sought, thus setting the appropriate scale and scope of review for the individual project.

(1) District Quality Control/Quality Assurance (DQC). All **decision documents** and **implementation documents** (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home Major Subordinate Command (MSC).

- (2) Agency Technical Review (ATR). ATR is mandatory for all decision documents and implementation documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published US Army Corps of Engineers (USACE) guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the Review Management Organization (RMO) and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. To assure independence, the leader of the ATR team shall be from outside the home MSC.
- (3) Independent External Peer Review (IEPR). IEPR may be required for decision documents and implementation documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR: Type I is generally for decision documents and Type II is generally for implementation products.
 - (a) Type I IEPR. Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions rendered on the proposed projects. Type I IEPR will cover the entire decision document or action and will address all the underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-209.

- (b) Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.
- (4) Policy and Legal Compliance Review. All decision documents and implementation documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the Chief of Engineers. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.
- (5) Cost Engineering Review and Certification. All decision documents and implementation documents shall be coordinated with the Cost Engineering Directory of Expertise (DX), located in the Walla Walla District. The DX, or in some circumstances regional cost personnel that are pre-certified by the DX, will conduct the cost ATR. The DX will provide certification of the final total project cost.

2 PROJECT DESCRIPTION

2.1 Authority

The authority for the proposed action is the DoD (Department of Defense) Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and the Pandemic Influenza Act of 2006 (Public Law 109-148, Chapter 3, Construction, and Flood Control and Coastal Emergencies) which appropriated funds to accelerate the completion of the previously authorized West Bank and Vicinity, New Orleans, Hurricane Protection Project.

The Westwego to Harvey Canal Hurricane Protection Project was authorized by the Water Resources Development Act (WRDA) of 1986 (Public Law 99-662, Sec. 401(b)). The WRDA of 1996 (Public Law 104-303, Sections 101(a)(17) and 101(b)(11)) modified the project and added the Lake Cataouatche area to the project. WRDA 1996 also authorized the East of Harvey Canal Hurricane Protection Project. WRDA 1999 (PL 106-53, Sec. 328) combined the three

projects under the name, the West Bank and Vicinity, New Orleans, Hurricane Protection Project.

The DoD (Department of Defense) Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and the Pandemic Influenza Act of 2006 (Public Law 109-148, Chapter 3, Construction, and Flood Control and Coastal Emergencies) or "3rd Supplemental," appropriated funds to accelerate the completion of the previously authorized project, and to restore and repair the project at full Federal expense.

In June 2006, the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and the Hurricane Recovery of 2006 (Public Law 109-234, Title II, Chapter 3, Construction, and Flood Control and Coastal Emergencies) or "4th Supplemental," appropriated funds and added the authority to raise levee heights where necessary, reinforce and replace floodwalls, and otherwise enhance the project to provide the levels of protection necessary to achieve the certification required for participation in the NFIP.

In May 2007, the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007 (Public Law110-28, Title IV, Chapter 3, Flood Control and Coastal Emergencies and Sec. 4302) or "5th Supplemental," provided \$1,300,000,000 to carry out projects and measures for the WBV and Lake Pontchartrain projects as described in Public Law 109-148 above, and provided flexibility to the Secretary to reallocate un-obligated funds from the Public Law 109-234 projects funded under the Flood Control and Coastal Emergencies heading, subject to coordination with the House and Senate Committees on Appropriation.

The Water Resources Development Act (WRDA) of 2007 (Public Law 110-114 at Section 7012) authorized the raising of levee heights and repair and replacement of floodwalls to achieve certification required for a 100-year level of protection in accordance with the NFIP. Section 3084 of WRDA 2007 further amended the existing project by striking "operation and maintenance" and inserting "operation, maintenance, rehabilitation, repair, and replacement," and by striking "Algiers Channel" and inserting "Algiers Canal Levees." It further changed the non-Federal cost share of the Algiers Canal portion of the project to 35 percent.

The 6th Supplemental, "Supplemental Appropriations Act, 2008," (Public Law 110-252, Title III, Chapter. 3, Civil Construction) provided WBV \$920,000,000 (funds that became available October 1, 2008) subject to a Federal 65% and 35% non-Federal cost share "to modify authorized projects in southeast Louisiana to provide hurricane, storm and flood damage reduction in the greater New Orleans and surrounding areas to the level of protection necessary to achieve the certification required for participation in the NFIP under the base flood elevations current at the time of enactment of this Act". This Act was passed on 30 June 2008.

The 7th Supplemental, "Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009," (Construction heading, Division B, Title I, Chapter 3 of Public Law

110-329) provides that the Secretary of the Army is directed to use \$350,000,000 of the \$1,500,000,000 appropriated under that heading to fund the estimated amount of non-Federal cash contributions to be financed in accordance with Section 103(k) of WRDA of 1986, over a period of 30 years from the date of completion of the work undertaken pursuant to the WBV PPA, or separable element thereof.

Authority for the mitigation of environmental impacts caused by water resources projects is provided to the Secretary of the Army by the Water Resources Development Acts (WRDA) 1986 Section 906, as amended, along with other statutes, including National Environmental Policy Act (NEPA), Clean Water Act (CWA), and Fish & Wildlife Coordination Act. Additionally, mitigation features are project features of the parent construction project which generated the mitigation requirements-in this case WPV. Therefore, the mitigation features are governed by the WPV project authorities and associated Project Partnership Agreements (PPA), under which the parent project is being executed.

2.2 Location

Generally mitigation should occur within the watershed in which the environmental impacts occurred. Environmental regulations and USACE policies establish preferences for mitigating for habitat losses in-kind and in close proximity to the location of the environmental impacts. Pre-Katrina mitigation will include projects adjacent to Bayou Segnette State Park and in St. Charles Parish. The following figure presents the mitigation project sites:



Figure 1. Pre-Katrina Mitigation Sites

2.3 Description

The purpose of this project is to provide compensatory mitigation for environmental impacts associated with hurricane risk reduction construction work on the west bank of the Mississippi River authorized prior to Hurricane Katrina. Projects will be funded through the 3rd, 5th, and 6th Supplemental Appropriations in accordance with the approved 2006 Abbreviated Project Information Report (APIR). Activities include but are not limited to environmental clearance, real estate acquisition, development of plans and specifications, construction, monitoring, Operations, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R), and adaptive management. The mitigation addresses impacts to bottomland hardwood and swamp habitats.

The non-Federal Sponsor (NFS) for this project is the Coastal Protection and Restoration Authority of Louisiana (CPRA) with a relevant cost share.

The WBV Pre-Katrina mitigation work will be further documented in an amendment to the 2006 APIR and in an accompanying Environmental Assessment (EA).

3 WORK PRODUCTS

All documents and supporting documentation will be produced in-house by the USACE New Orleans District. Documents to be produced include: Plans and Specifications (P&S), Design Documentation Report (DDR), Soils Report, EA, and an amended APIR.

There will be no work-in-kind provided by the NFS for review under this RP. The supporting documents for these implementation documents to be reviewed under this RP are identified in Section 4 Scope of Review.

4 SCOPE OF REVIEW

Factors including Safety Factors affecting the scope and level of review:

- The implementation of the Environmental Mitigation is not considered to be challenging by technical, institutional, or social standards. Mitigation is generally viewed positively by social standards. USACE has institutional knowledge on the subject and no new technical aspects will be implemented.
- No significant economic, environmental, and/or social effects to the Nation are anticipated from construction of the project. No adverse impacts on scarce or unique cultural, historic, or tribal resources are anticipated. No adverse impacts on fish and wildlife species or their habitat are anticipated. No adverse impacts on species listed as endangered or threatened, or to the designated critical habitat of such species, under the Endangered Species Act are anticipated. Typically, sites chosen for the construction of an approved mitigation plan exist in a degraded or less than desirable state in terms of quality and productive habitat. The purpose of the mitigation is to improve overall quality of environmental areas. Furthermore, every effort will be made to avoid and minimize adverse impacts to any significant resource previously mentioned.
- The project is not anticipated to be highly controversial in regards to significant public dispute as to the size, nature, or effects of the project or to the economic or environmental costs or benefits of the project.
- The project will not involve significant threat to human life/safety assurance. Construction of a mitigation project does not produce a structure that presents a threat to life or safety. Construction may include, but is not limited to the rehabilitation of site hydrology and the planting of desirable trees, shrubs, or grasses. None of the features listed typically presents an adverse risk potential during or post-construction.
- The interagency team was involved in mitigation plan development as a subunit of the PDT (see Appendix A). Various agencies have responsibility for compliance with various aspects of mitigation laws and policies, specifically the Fish and Wildlife Coordination Act and Clean Water Act Section 404 regulations.
- The project will not contain influential scientific information or be a highly influential scientific assessment.
- The information in the implementation documents will not be based on novel methods, will not involve the use of innovative materials or techniques, will not present complex challenges for interpretation, containing precedent-setting methods or models, and will

not present conclusions that are likely to change prevailing practices. The project will not contain influential scientific information or be a highly influential scientific assessment. The study/project is not expected to be a source of profound or influential scientific information on which future studies/projects will rely.

- The proposed project design will not require redundancy, resiliency, and/or robustness. Mitigation sites are not intended to be constructed to reduce risk. Project features commonly associated with flood protection projects would not apply to mitigation.
- The project is proceeding under the approved HSDRRS PgMP process which has some overlapping planning, design, and Right of Entry (ROE) for construction activities in order to streamline pre-construction activities and achieve mitigation as concurrently as possible with the impacts that are being mitigated. The intention is to minimize the time that a habitat unit is lost without replacement through implementation of compensatory mitigation.
- The project lacks the need for more conservative assumptions to increase capacity to compensate for greater degrees of uncertainty and risk.
- The project construction is not unique nor is the acquisition plan. Construction of a mitigation plan will utilize current best management practices, reforestation methods, and survivorship thresholds. Similar mitigation projects have been implemented within USACE.

4.1 District Quality Control Activities

DQC will be managed by the home district in accordance with the Major Subordinate Command (MSC) and district Quality Management Plans.

DQC will be performed by MVN Engineering Division (ED), Planning Division, Real Estate Division, Operations Division, Construction Division, and Office of Counsel for the 95% P&S (and BCOE), DDR, Soils Report, EA, and APIR amendment.

DQC will be done throughout the design process; in particular, at the identified milestones. Greater details for the DQC effort will be presented in the Quality Control Plan (QCP).

4.2 Agency Technical Review

Implementation Documents

The ATR of the implementation documents will be managed by the lead, [Review Management Organization (RMO)], Mississippi Valley Division.

- **Documents.** CEMVN will prepare the following documents that will provide the technical basis for the Environmental Mitigation project. Each document will be sent in its entirety for review.
- Soils Report
- Design Documentation Report

- Plans and Specifications (95%)
- Environmental Assessment
- MII Cost Estimates

The MII Cost Estimate ATRs will be conducted by the Walla Wall District who serves as the Cost Engineering Directory of Expertise (DX).

The APIR amendment will not undergo ATR as the only document to which it references is the EA which will have already undergone an ATR.

Review team composition requirements are discussed in Section 5.2. Cost and scheduling is discussed in Section 8.

4.2.1 Work Items for Decision Documents and Implementation Documents.

Specific work items shall include but not be limited to the following:

- Review of all documents identified.
- Review of design calculations.
- Enter and resolve all review comments resulting from reviews of the work through DrChecks.
- ATR certification upon completion of each review. ATR certification should be signed by the ATR team leader as well as the ED chief for the agency performing the review. The ATR certificates should be used for certifying all reviews. Each certification will include copies of DrChecks review comments showing that all comments are resolved and closed.
- Specific submission requirements will be coordinated with the MVN POC.

The primary objectives of the review are to ensure that:

- a. The project meets the Government's scope, intent and quality objectives.
- b. Design concepts are valid.
- c. The design is feasible and will be safe, functional, and constructible.
- d. Appropriate methods of analysis were used and basic assumptions are valid and used for the intended purpose.
- e. The source, amount, and level of detail of the data used in the analysis are appropriate for the complexity of the project.

- f. The project complies with accepted practice and design criteria within the industry.
- g. All relevant engineering and scientific disciplines have been effectively integrated.
- h. Content is sufficiently complete for the current phase of the project and provides an adequate basis for future development effort.

4.3 Independent External Peer Review

Type I IEPR. Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions rendered on the proposed projects. Type I IEPR covers the entire decision document or action and addresses all the underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-209.

Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

The project does not require a Type I or Type II IEPR because the project is in implementation, not study phase, and because the project does not risk human safety. Factors affecting the decision of the necessity for an IEPR Type I and Type II are discussed further in Section 4 Scope of Review.

4.4 Policy Compliance and Legal Review

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority. The technical review efforts addressed in this RP, i.e. DQC and ATR, are to augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.

4.5 **Other Peer Reviews**

There are no known additional Peer Review requirements specific to the home MSC or district or unique to this project.

5 REVIEW TEAM

5.1 District Quality Control Activities

The DQC will be managed by the home district in accordance with Major Subordinate Command (MSC) and District Quality Management Plans. The detailed lists of team members will be included in the Quality Control Plan (QCP).

5.2 Agency Technical Review

The RMO will be tasked in providing the specific ATR team members as the project develops for the implementation documents for this single purpose project. The ATR team members will be from outside of the home district, MVN. The home district will not recommend team members. The ATR team leaders will be from outside of the home district as well as outside of the home MSC.

Required ATR Team Expertise. Team members will demonstrate senior-level competence in the type of work being reviewed. Junior-level staff cannot be members of the team. All team members should have a minimum of 10 years of experience within their discipline and should be registered in their field of expertise. The following table presents the disciplines and their required level of expertise. Note that not all of the listed disciplines will be necessary for the review of the documents in this RP.

Table 1: ATR Team Requirements

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with
	extensive experience in preparing Civil Works decision
	documents and conducting ATR. The ATR Lead should
	be from outside of the Mississippi Valley Division (MVD).
	The lead should also have the necessary skills and
	experience to lead a virtual team through the ATR
	process. Typically, the ATR lead will also serve as a
	reviewer for a specific discipline (such as planning,

	economics, environmental resources, etc).
Hydraulic Engineering	Hydraulic team member will demonstrate senior-level competence in the type of work being reviewed. Hydraulics team member should have a minimum of 10 years of experience within their discipline and should be registered in their field of expertise.
Geotechnical Engineering	Geotechnical team member will demonstrate senior- level competence in the type of work being reviewed. Geotechnical team member should have a minimum of 10 years of experience within their discipline and should be registered in their field of expertise.
Civil Engineering	Civil team member will demonstrate senior-level competence in the type of work being reviewed. Civil team member should have a minimum of 10 years of experience within their discipline and should be registered in their field of expertise.
Structural Engineering	Structural team member will demonstrate senior-level competence in the type of work being reviewed. Structural team member should have a minimum of 10 years of experience within their discipline and should be registered in their field of expertise.
Real Estate	Real Estate team member must be an appraiser at the GS-12 level with at least 5 years of federal appraisal experience. Team member should have experience in review of feasibility studies, real estate plans, and gross appraisals.

Biologist/Environmental	Biologist team member will demonstrate senior-level
	competence in the type of work being reviewed.
	Biologist should have a minimum of 10 years experience
	within their discipline and be adept at environmental
	impact analysis, NEPA compliance and environmental
	benefits
Plan Formulator	Plan formulator team member will demonstrate senior-
	level competence in the type of work being reviewed.
	Plan formulator should have a minimum of 10 years
	experience within their discipline. Plan formulator
	should be familiar with environmental benefits/model
	applications

All cost estimates are reviewed by and certified by the Cost DX in accordance with EC 1165-2-209.

The WBV Pre-Katrina Environmental Mitigation has been congressionally authorized and funded. This is the implementation of an already approved plan.

5.3 Independent External Peer Review

The project is in implementation, not study phase, and does not risk human safety; therefore, it is not required that documents undergo a Type I or Type II IEPR.

6 Model Certification

Planning Models. Planning models are not applicable to implementation documents.

Engineering Models. No engineering modeling is expected at this time.

7 PUBLIC COMMENT

To ensure that the peer review approach is responsive to the wide array of stakeholders and customers, both within and outside the Federal Government, this Review Plan will be published on the district's public internet site following approval by MVD at

http://www.mvn.usace.army.mil/ and www.nolaenvironmental.gov. This is not a formal comment period and there is no set timeframe for the opportunity for public comment. If and when comments are received, the PDT will consider them and decide if revisions to the review plan are necessary. The public is invited to review and submit comments on the plan as described on the web site.

Public Reviews. The Public will have a 30 day period to review and provide comments on the EA. The EA is scheduled to begin public review by October 12, 2011. Comments will be addressed before finalization of the EA.

The public, including scientific or professional societies, will not be asked to nominate potential external peer reviewers.

8 SCHEDULE and COSTS

The following tables present the schedules, disciplines needed, and cost estimates of the ATR efforts. DQC schedules and costs will be developed in the QCP.

Table 3:	WBV Pre-Katrina	Environmental	Mitigation ATR
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Document	Quantity	Date Document Ready for ATR	# of	# of Each Discipline Needed for Each Document				Cost Estimate
			Geotechnic al	Structural	Civil	Hydraulic	Other	
Plans and Specifications (95%)	2	30-May-12	1	0	1	0	(1) Biologist,	
Design Documentation Report	2	30-May-12	1	0	1	0	(1) Biologist	
MCACES Second Generation (MII) Cost Estimate	2	21-Oct-12	0	0	0	0	(1-2) Cost Estimators	
Soils Report	2	1-Nov-12	1	0	1	0	(1) Biologist	
Environmental Assessment	1	completed	0	0	0	0	(2) Biologists	

Documents will be produced in-house and the ATR will be conducted at 95% completion for the P&S, Soils Report, and DDR. The EA will undergo the ATR before being released for public comment. Quality control measures will be implemented throughout project development internally as well as the formal DQC effort.

The ATR effort for the cost estimates, construction schedules and contingencies are coordinated with the Cost Engineering Directory of Expertise (DX) in the Walla Walla District per EC 1165-2-209.

The amended APIR is scheduled for Division review by November 15, 2011. The APIR will incorporate the EA and therefore the ATR Certification form from the EA review will be included with the amended APIR when it is sent to Division for review.

All costs presented in this section are intended to be estimates only at this time and are subject to change depending on the complexity of the documentation and reviews. Additional ATR costs would be \$xxxx for the ATR Lead for their management of the process. The ATR Lead will need no less than 30 days notice for providing review team members and beginning the reviews.

9 DOCUMENTATION OF REVIEWS

The District Quality Control (DQC) documentation will be defined in the QCP. The DQC will document comments and backchecks. These records will be passed to the ATR team to aid in their review process.

The ATR activities for Environmental Mitigation will be completed by a District named by the RMO. The review teams will use the Document Review and Checking System (DrChecks) to document the review process. Reviewers will be responsible for backchecking responses to the review comments and either close the comment or attempt to resolve any disagreements. For each of the reviews, a copy of the DrChecks comments and their responses for this project will be attached to this Review Plan as an Appendix.

a. Documentation of ATR. DrChecks review software will be used to document all ATR comments,

responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

- 1. The review concern identify the product's information deficiency or incorrect application of policy, guidance, or procedures;
- 2. The basis for the concern cite the appropriate law, policy, guidance, or procedure that has not been properly followed;

- The significance of the concern indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
- 4. The probable specific action needed to resolve the concern identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the Project Delivery Team response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, PCX, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date. A sample Statement of Technical Review is included in Appendix F.

A printout of DrChecks comments (which should be closed upon resolution) will be attached.

10 POINTS OF CONTACT

Questions about this Review Plan may be directed to the applicable District Project Delivery Team.

Review Plan POC: John Templeton – (504) 862-1021 Mitigation Senior Project Manager: Soheila Holley – (504) 862-1007 District Quality/Review Manager: Danny Thurmond – (504) 862-1214 Chief, Engineering Division: Walter Baumy – (504) 862-2240 ATR MII Cost Estimates Team Walla Walla District

11 SUMMARY OF REVIEW PLAN UPDATES

Revision No.	Date	Description of major change(s)

Appendix A

List of Project Delivery Team Members

Julie Vignes	Branch Chief (WBV)
Soheila Holley	Senior Project Manager (Mitigation)
John Templeton	Project Manager (WBV Project)
Tutashinda Salaam	Project Manager (PRO Mitigation)
Tanja Doucet	Program Analyst (WBV)
Greg Miller	Plan Formulation Branch Chief
Joan Exnicios	Environmental Branch Chief
Nathan Dayan	Environmental Manager
Gigi Coulson	Plan Formulation Lead
Maurya Kilroy	Office of Counsel
Lisa Evans	Office of Counsel
Aven Bruser	Office of Counsel (Environmental)
Daryl Glorioso	Office of Counsel (HSDRRS)
Bob Northey	Office of Counsel (Environmental)
Hope Jackson	Real Estate Planning (lead)
Linda Thompson	Real Estate Acquisition (lead)
Gienell Declet-Martinez	Engineering - Project Engineer (Engineering Control)
Paul Bellocq	Engineering - Hydraulics Lead
Heather Hickerson	Engineering - Geotech Lead
Jason Binet	Engineering - Civil Lead
Benjamin Salamone	Engineering - Cost Lead
Richel Green	Engineering - Relocations
Keith Marino	Engineering - GIS
Chris Dunn	Engineering - Structures Lead
Stephen Pfeffer	Operations/Regulatory (lead)
Adam Jones	Contracting (lead)
Charles Everhardt	Construction (lead)
Crystal Braun	Economics (lead)
Shantel Washington (contractor)	Public Affairs Office (lead)
Frank Vicidomina	Value Engineering (lead)
See HSDRRS Mitigation PgMP	Mitigation Program Management Team
OCPR	Non-Federal Sponsor
CPRA	Non-Federal Sponsor

Interagency Team:

Elizabeth Behrens (Team Lead)	USACE Environmental
John Ettinger	Environmental Protection Agency
Barbara Keeler	Environmental Protection Agency
Dusty Haigler	National Park Service
Pat Williams	NOAA
Richard Hartman	NOAA
James Barlow	USACE Regulatory
Brian Breaux	USACE Regulatory
Cathy Breaux	USFWS
David Castellanos	USFWS
David Walther	USFWS
Heather Finley	LA Wildlife and Fisheries
Kyle Balkum	LA Wildlife and Fisheries
Frank Cole	State of LA
Elizabeth Davoli	State of LA
Jeff Harris	State of LA
Tim Killeen	State of LA
Kirk Rhinehart	State of LA
Stephanie Zumo	State of LA

Note: The current PDT will be supplemented by additional PDT members as individual contract P&S are started. These tables will be updated occasionally as team members change.

Appendix B

SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECSION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the <u><type of product></u> for <u><project name and location></u>. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

SIGNATURE

<u>Name</u>	Date
ATR Team Leader	
Office Symbol/Company	
SIGNATURE	
<u>Name</u>	Date
Project Manager	
<u>Office Symbol</u>	
SIGNATURE	
Name	Date
Architect Engineer Project Manager ¹	
<u>Company, location</u>	
SIGNATURE	
<u>Name</u>	Date
Review Management Office Representative	
<u>Office Symbol</u>	

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: <u>Describe the major technical concerns</u> <u>and their resolution</u>.

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE

<u>Name</u>

Chief, Engineering Division

Office Symbol

SIGNATURE

<u>Name</u>

Chief, Planning Division

Office Symbol

¹ Only needed if some portion of the ATR was contracted

Date

Date

STATEMENT OF TECHNICAL REVIEW

COMPLETION OF QUALITY ASSURANCE REVIEW AND AGENCY TECHNICAL REVIEW

The [name of ATR team leader's district] Agency Technical Review (ATR) team has completed the ATR of [type of product] for [project name and location]. Notice is hereby given that (1) a Quality Assurance review has been conducted as defined in the [name of home district] Quality Assurance Plan and (2) an agency technical review, appropriate to the level of risk and complexity inherent in the project, has been conducted. The ATR has been conducted as defined in the project's Review Plan. During the agency technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the result, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. All comments resulting from this QA review and ATR have been resolved.

[name] QA Review Team Leader [name of home district] Date

[name] Project Manager [name of home district] Date

CERTIFICATION OF QUALITY ASSURANCE REVIEW AND AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: (*Describe the major technical concerns, possible impact, and resolution*)

[name] Chief, Engineering Division [name of home district] Date